

REMARKS

Claims 1-3, 5 and 11-13 are pending. No new matter has been added by way of the present amendments. For instance, the inequalities and moment of inertia amended into claim 1 are supported by originally filed claim 6. The thickness of the flange amended into claim 1 is supported by originally filed claim 2 as well as the present specification at page 7, paragraph [0052]. The preambles of the claims have also been amended to reflect that the sheet pile is made of "steel" as supported by originally filed claim 4. Newly added claim 11 is supported by the present specification at page 2, paragraph [0002]. Newly added claim 12 is supported by originally filed claim 6. Lastly, newly added claim 13 is supported by the present specification at page 7, paragraph [0046]. Accordingly, no new matter has been added.

In view of the following remarks, Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

1. Priority Under 35 U.S.C. §119

Applicants note that the Examiner has not acknowledged the claim for foreign priority or receipt of the Japanese priority documents. Priority was claimed to (and certified copies were

provided) JP 2002-331761 and JP 2003-204491 at the time of filing the present application. The Examiner is requested to acknowledge the claim for foreign priority and receipt of the certified documents.

2 Issues under 35 U.S.C. §§ 102(b) and 103(a)

The Examiner has rejected claims 1-10 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over JP 60-85326 (hereinafter JP '326).

The Examiner has also rejected claims 1-10 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Yeates et al (hereinafter Yeates).

Applicants respectfully traverse each of the Examiner's rejections.

2.1 There exists no anticipation based upon either JP '326 or Yeates

Applicants respectfully submit that the present claims are not anticipated by either of the references of JP '326 or Yeates. Neither reference includes a specific disclosure of a product falling within the scope of the present claims. Thus, there exists no anticipation. This will be explained in detail below.

Independent claim 1 of the present invention relates to a steel sheet pile, wherein the sheet pile has a geometrical moment of inertia  $I$  of larger than  $9,500 \text{ cm}^4/\text{m}$ . Further, a cross-section of the sheet pile meets all of the following inequalities:

$$890 \leq B \leq 920;$$

$$280 \leq B_f \leq 350;$$

$$210 \leq H \leq 350; \text{ and}$$

$$B_f/32.4 \leq t \leq 28.$$

In the above inequalities,  $B$  is the effective width (mm) of the sheet pile,  $B_f$  is the width (mm) of the flange,  $H$  is the height (mm) of the sheet pile, and  $t$  is the flange thickness (mm). The cited references of JP '326 and Yeates are completely silent concerning this specific combination of measurements.

#### 2.1.1 Discussion of JP '326 and lack of anticipation

Concerning JP '326, the Examiner asserts that this document discloses a specific width of the sheet pile and a specific height of the sheet pile. However, the Examiner also asserts "the dimensions of the width define the flange width as around 240-400 mm." The Examiner provides no explanation for the support of the disclosure of 240-400 mm in the JP '326 document. If the Examiner

has extrapolated these measurements from the Figures, this is incorrect as will be discussed below.

A review of JP '326 reveals a disclosure of a sheet pile with an effective width from 600 mm to 1000 mm and a height from 200 mm to 600 mm. However, there is no suggestion or disclosure concerning the specific relation between the flange width (Bf) and the effective width (B). Claim 1 requires the following two ranges for these measurements:

$$890 \leq B \leq 920; \text{ and}$$

$$280 \leq B_f \leq 350.$$

As seen in Figure 4,  $B_f/B$  must be less than about 45% in the case where B is 1000mm. Alternatively,  $B_f/B$  must be less than about 40% in claim 1, where B is 890 mm and Bf is 350 mm.

A comparison with JP '326 reveals that, using a ruler, Figures 6 and 7 could hypothetically be measured to calculate a ratio of about 40%. Applicants believe, without any guidance given by the Examiner, that this is the apparent source of the Examiner calculation (e.g., 600-1000mm x 40% = 240-400mm). However, this is an incorrect manner to establish a prior art rejection.

The Examiner is not free to extrapolate measurements from the diagrams and figures of either JP '326 (or Yeates) and thereby construct a prior art rejection. When the reference fails to

disclose that the drawings are to scale and is silent as to dimensions, arguments based on measurements of the drawing features of little value. Hockerson-Halberstadt, Inc. v. Avia Group Int'l, 222 F.3d 951, 956, 55 USPQ2d 1487, 1491 (Fed. Cir. 2000); see also In re Wright, 569 F.2d 1124, 1127, 193 USPQ 332, 335 (CCPA 1977); In re Olson, 212 F.2d 590, 592, 101 USPQ 401, 402 (CCPA 1954); cf. MPEP § 2125 (May 2004).

Thus, in the present case there is no indication that the figures of JP '326 are drawn to scale. Accordingly, the Examiner cannot use these drawings as a basis for his rejection. Thus, JP '326 is totally silent concerning the relative values of B and Bf. For this reason alone, there exists no anticipation based upon JP '326.

The Examiner is also not free to argue that the reference discloses generic values for certain limitations, or overlapping ranges. Even with generic values or overlapping ranges, a point not conceded by Applicants, JP '326 still fails to disclose the specific combination of inequalities recited in the present claims, for instance the relative values of B and Bf.

Applicants remind the Examiner that there can be no anticipation where one skilled in the art would have to choose judiciously from a genus of possible combinations, In re

Sivaramakrishnan, 213 USPQ 441, 673 F.2d 1382 (CCPA 1982), or where the reference does not highlight the claimed mixture, among the many dozens disclosed, or suggest the claimed ratio, In re Kollman et al., 201 USPQ 193, 595 F.2d 48 (CCPA 1979).

Further, anticipation is not established if in reading a claim or something disclosed in a reference it is necessary to pick, choose and combine various portions of the disclosure not directly related to each other by the teachings of the reference. In re Arkley, 455 F.2d 586, 587-88, 172 U.S.P.Q. 524, 526 (CCPA 1972); see also ex parte Beuther, 71 U.S.P.Q.2d 1313, 1316 (Bd. Pat. App. & Inter. 2003) (unpublished).

In the present instance, JP '326 fails to suggest or disclose the specific combination of measurements recited in the present claims. The Examiner is not free to pick, choose and combine various portions of the disclosure absent a suggestion by the reference to do so. Accordingly, there exists no anticipation based upon JP '326.

#### 2.1.2 Discussion of Yeates and lack of anticipation

Yeates discloses a sheet pile with  $H > 150\text{mm}$ ,  $t > 5\text{mm}$ ,  $0 < B/H < 1.2$ ,  $100 < B/t$  and  $B > 800\text{mm}$  (see claim 5 thereof). A hat-type sheet pile is disclosed in Fig. 1b of Yeates. However, as with JP

'326, Yeates fails to suggest or disclose the specific relation between the flange width (Bf) and the effective width (B) recited in the present claims.

Based upon Fig. 1b of Yeates, it is hypothetically possible, using a ruler, to calculate a relationship between Bf and B. However, as discussed above, this is improper for the establishment of a prior art rejection. That is, in the present case there is no indication that the figures of Yeates are drawn to scale. Accordingly, the Examiner cannot use these drawings as a basis for his rejection. Thus, Yeates remains totally silent concerning the relative values of B and Bf. For this reason alone, there exists no anticipation or obviousness based upon Yeates.

The Examiner is also not free to argue that the reference discloses generic values for certain limitations, or overlapping ranges. Even with generic values or overlapping ranges, a point not conceded by Applicants, Yeates still fails to disclose the specific combination of inequalities recited in the present claims, for instance the relative values of B and Bf. Accordingly, there exists no anticipation based upon Yeates.

Further, Yeates is totally silent concerning specific examples of sheet piles. Yeates is also silent concerning problems of a cross-sectional performance per weight in heavy and long steel

sheet piles, which is solved by the present invention. Yeates is focused rather on solving drawbacks in light ( $t \leq 5\text{mm}$ ) sheet piles. Reference is made to lines 54-57 in paragraph 1, lines 17-25 in paragraph 4 and lines 35-39 in paragraph 4 of Yeates). In contrast, the present invention relates to a specific type of sheet pile. The Examiner's attention is directed to the thickness of the sheet pile as recited in the present claims (which must be greater than or equal to 8.6 mm, but less than or equal to 28 mm; note that 8.6 mm is calculated as  $B_f/32.4$ , or  $280/32.4$ ). These claims are thus directed to heavier sheet piles than those addressed by Yeates. One of ordinary skill in the art would not arrive at such a specific and narrow range of size for a steel sheet pile without using the present specification for guidance. Thus, for this additional reason, there exists no anticipation based upon Yeates.

2.2 There exists no obviousness based upon either JP '326 or Yeates

Based upon the above discussion, it is evident that there exists no anticipation of the present claims based upon either of JP '326 or Yeates. Further, there can be no obviousness where there is no suggestion of the specific features recited in the present claims. As discussed above, both JP '326 and Yeates fail to suggest or disclose the subject matter of the present claims.



Further, even if argued to have "overlapping" ranges, the Examiner still has not established a case of *prima facie* obviousness.

Applicants remind the Examiner that the fact that a claimed product is within the broad field of the prior art and one might arrive at it by selecting specific items and conditions does not render the product obvious in the absence of some directions or reasons for making such selection. Ex parte Kuhn, 132 USPQ 359 (POBA 1961). Accordingly, there exists no obviousness based upon these references.

Based upon the above, Applicants respectfully request that the Examiner withdraw the rejections under 35 U.S.C. §§102(b)/103(a) of the present claims over either JP '326 or Yeates.

3. Issues under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-10 under 35 U.S.C. § 103(a) as obvious over JP '326 in view of Europile.

The Examiner has also rejected claims 1-10 under 35 U.S.C. § 103(a) as obvious over Yeates in view of Europile.

Applicants respectfully traverse each of the Examiner's rejections.

3.1 Preliminary comment

As a preliminary note, Applicants point out that there exists an inconsistency in the Examiner's statement at page 4, third full paragraph of the outstanding Office Action. In particular, the Examiner appears to base the rejection upon JP '326 in view of Europile, however, the body of the rejection appearing on page 5 refers to a rejection of the claims based upon Yeates in view of Europile. Accordingly, Applicants have treated this rejection as a rejection of claims 1-10 as being obvious over Yeates in view of Europile.

3.2 There exists no obviousness based upon either JP '326 or Yeates in view of Europile

As indicated above, the Examiner has rejected claims 1-10 as being obvious over either of JP '326 or Yeates in view of Europile. Applicants traverse and submit that the Europile reference is unable to cure the deficiencies of the two primary references. These deficiencies are discussed at length above.

The Europile reference is silent concerning the specific combination of inequalities discussed in the present claims, for instance claim 1. For instance, just as in both JP '326 and Yeates, Europile fails to suggest or disclose the specific relation between B and Bf required by the present claims. Further, as in

the Yeates reference, Europile fails to suggest to disclose the specific combination of inequalities in addition to the thickness of flange required by the present claims.

Accordingly, whether taken alone or in combination, there is no *prima facie* obviousness of the present claims based upon the cited art of JP '326, Yeates and Europile.

In summary, Applicants respectfully submit that the Examiner has failed to present a valid case of anticipation and obviousness. The Examiner is therefore requested to withdraw the outstanding rejections and allow the currently pending claims.

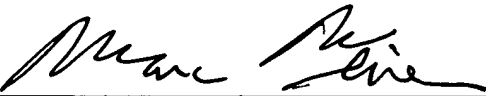
If the Examiner has any questions or comments, please contact Craig A. McRobbie, Reg. No. 42,874, at the offices of Birch, Stewart, Kolasch & Birch, LLP at the number listed below.


Applicant hereby respectfully petitions for a one (1) month extension of time for the filing of the present paper in accordance with the provisions of 37 C.F.R. § 1.136 and 37 C.F.R. § 1.17. The required fee of \$120.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fee required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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